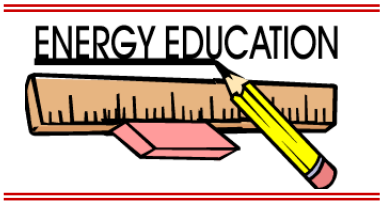
Rebuild Massachusetts

REBUILD MASSACHUSETTS

A Massachusetts Division of Energy Resources Rebuild America Program
Sponsored by the United States Department of Energy



At the State House on June 14, 2005, two Massachusetts schools were honored for their energy education projects by the National Energy Education Development (NEED) project.

Chilmark Elementary School in Martha's Vineyard was chosen as the ***2005 Massachusetts State School of the Year***, and Eastham Elementary School in Cape Cod was chosen as this year's ***Massachusetts State Rookie of the Year*** as well as the national Primary Rookie of the Year.

The energy projects were planned and implemented by students to educate their peers and communities about energy – the science, the sources, the uses, and the issues. The work of these students and teachers is of particular importance in a time of growing energy challenges and opportunities.

NEED materials and training programs provide comprehensive, objective information about the scientific concepts of energy and the sources of energy - their use and their impact on the environment, the economy and society.

The Cape and Vineyard are the first communities to offer NEED to Massachusetts's schools with the "Plugging Energy into the Classroom" project. For more information about this initiative, contact Debbie Fitton, Education Coordinator for the Cape Light Compact.

For more information about NEED, contact Ms. Mary Spruill at mspruill@need.org or go to NEED's web site at http://www.need.org

GREEN BUILDING DESIGN

Dynamic Interactions and Competing Objectives in Multifamily Green Building Design

by John Snell and Ken Neuhauser

In November, 2001 US HUD awarded a HOPE VI grant to the Boston Housing Authority (BHA) to demolish 413 "severely distressed" apartments of public housing in East Boston Massachusetts and construct 286 new mid rise and low rise apartments on this site and 360 new mid rise and low rise apartments near this site. As part of the design development process, BHA and Trinity East Boston Development (the competitively selected development team) investigated opportunities to construct "high performance" green housing for one of the mid-rise buildings with 119 apartments. The authors of this paper provided technical support.

This paper will shed light on the dilemmas that the designers faced as well as the performance paradoxes of a project that makes significant strides towards optimization but is fully grounded in present realities of the building industry.

To read this paper, go to:
http://www.mass.gov/Eoca/docs/doer/dicomgbd-a.pdf

TOOLS FOR THE JOB

Energy Design Resources

Funded by California utility customers, Energy Design Resources offers a valuable palette of energy design tools and resources that help make it easier to design and build energy-efficient commercial and industrial buildings.

Too busy? Look at the Virtual Workshops.

BetterBricks

Betterbricks helps the commercial building professional use energy efficiency strategies to achieve sustainable high performance buildings.

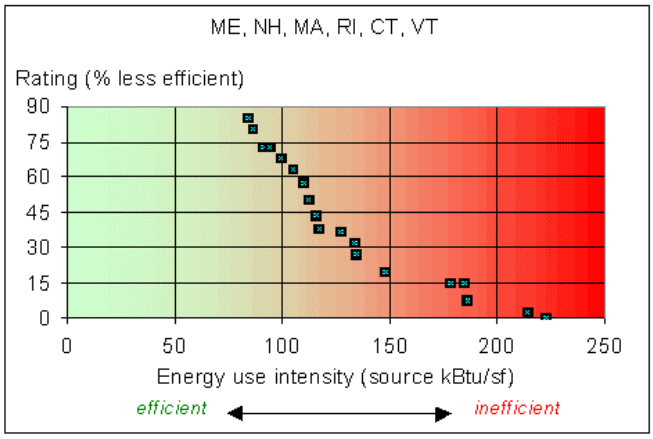
BENCHMARKING YOUR BUILDING

OAK RIDGE NATIONAL LAB
BUILDING TECHNOLOGY CENTER

Comparing annual energy use intensities (EUIs) can quickly demonstrate how the energy performance of your building compares to others. Usually expressed in kBtu/sf, the EUI indicates the rate at which energy is used at your building.

Why is this important? The lower your percentage rating, the higher your building's potential for energy use and cost reductions.

Energy Use Intensity Distributions: K-12 Schools
(descending cumulative histograms)



Source: Oak Ridge National Lab

This site provides the tools to calculate your kBtu, select building type, estimate potential savings, and even answer your questions.

Go to: http://eber.ed.ornl.gov/benchmark/homepage.htm

To view the entire array of resources go to:
http://eber.ed.ornl.gov

CREATIVE FUNDING FOR CLEAN ENERGY PROJECTS

for
Municipal Officials

Presented by

Local Governments for Sustainability

Learn about opportunities and available resources to promote and support clean energy projects in your communities

Boston	Amherst
September 29, 2005	September 30, 2005
9:00 – 4:00	9:00 – 4:00

To register please contact:
kim.lundgren@iclei.org

Energy efficiency has historically and rightfully been considered the most important attribute of a sustainable building. Although the impact on the environment from constructing the building can be significant, the accumulated environmental impact of energy consumption, which repeats year after year throughout the lifetime of the building, usually adds up to several times the consequences of its initial construction. These impacts include on-site emissions that result from burning fuel and off-site emissions at the power plant as a consequence of generating the electricity used in the building. Furthermore, there is more at stake than just saving energy and reducing emissions – good design can improve the productivity of staff who work in Lab facilities, improve creativity, and increase health.

Dr. J. Douglas Balcomb,
Research Fellow, National Renewable Energy Laboratory
LANL Sustainable Design Guide

Rebuild Massachusetts
c/o The Commonwealth of Massachusetts, Division of Energy Resources
Attention: Eileen McHugh
Rebuild America State Representative
100 Cambridge Street, Suite 1020
Boston, Massachusetts 02114
T: (617) 727-4732 F: (617) 727-0030 W: www.mass.gov/doer